

**REMARKS**

By this Amendment, Applicants amend the specification to correct a minor typographical error. Applicants also amend claims 5, 7, 9, 11, and 12 for clarification and to correct minor formal errors. Accordingly, claims 1-12 remain pending in the application.

Applicants amend claim 5 to include definitions of terms of an equation included in claim 5, where the terms were not specifically defined within the claim previously, but were defined at least in paragraph [00033] or [00048] of the subject application.

Applicants also amend claim 7 to replace a term in the definitions of terms of an equation included in claim 7, where the replacement is supported in the subject application at least in paragraphs [00055] and [00056] of the subject application. Applicants further amend claim 7 to include a definition of the term  $c_i$  of another equation included in claim 7, where the term was previously not specifically defined in the claim, but was defined at least in paragraph [00055] of the subject application. Applicants also amend claim 9 to correct a minor typographical error. In addition, Applicants amend claim 11 to replace a term in the definitions of terms of an equation included in claim 11, where the replacement is supported in the subject application at least in paragraphs [00055] and [00056] of the subject application. Applicants further amend claim 11 to remove an equation from claim 11 and the related definitions of terms of the equation. Applicants also amend claim 12 to include definitions of terms of an equation included in claim 12, where the terms were not specifically defined within the claim previously, but were defined at least in paragraph [00033], [00048], or [00050] of the subject application.

Applicants amend the claims for the foregoing reasons and not in response to anything in the Office Action.

Applicants thank the Examiner for acknowledging the claim for priority and receipt of the priority document.

Applicants respectfully request that the Examiner indicate whether the Drawings are acceptable.

Applicants acknowledge the allowance of claims 1-7.

Reexamination and reconsideration are respectfully requested in view of the following remarks.

**35 U.S.C. § 102**

The Office Action rejects claims 8-12 under 35 U.S.C. § 102(b) over so-called “admitted prior art” (“APA”).

Applicants respectfully submit that claims 8-12 are patentable over any actual admitted prior art for at least the following reasons.

Applicants respectfully traverse the suggestion that the entire contents of the Background and Summary section of the subject application are APA. Nowhere in the subject application do the Applicants suggest that this entire section is prior art. For example, paragraphs [00016]-[00022] of the subject application clearly do not describe prior art, but rather describe various features of one or more claims of the claimed invention.

The conventional method of determining a gate capacitance of a MOS transistor illustrated in FIG. 1 does not disclose each and every element of claims 8-12, and thus, these claims are not anticipated by FIG. 1, and are deemed patentable over the APA.

**Claim 8**

Among other things, the method of determining a gate capacitance of a MOS transistor of claim 8 includes calculating a calculated dissipation factor. Applicants respectfully submit that the APA does not disclose calculating a calculated dissipation factor.

The Office Action states that calculating a calculated dissipation factor is disclosed in step 140 of FIG. 1, and paragraphs [00011] and [00012]. Applicants

respectfully submit that calculating a calculated dissipation factor is not disclosed in paragraph [00011] or [00012], or in step 140, and in fact neither paragraphs [00011] and [00012], nor step 140 even mention the words “dissipation factor.”

Also, among other things, the method of determining a gate capacitance of a MOS transistor of claim 8 includes a feature of repeating steps (b) and (c) of claim 8 until both the calculated capacitance is equal to the measured capacitance and the calculated dissipation factor is equal to the measured dissipation factor. Applicants respectfully submit that the APA does not disclose a calculated dissipation factor, as stated above, and thus, the APA cannot disclose repeating steps (b) and (c) until a calculated dissipation factor is equal to the measured dissipation factor.

The Office Action states that these features are disclosed in step 150 of FIG. 1, and paragraph [00012]. Applicants respectfully submit that this combination of features is not disclosed in paragraph [00012] or step 150, and in fact, neither paragraph [00012], nor step 150 even mention the words “dissipation factor.”

Additionally, among other things, the method of determining a gate capacitance of a MOS transistor of claim 8 comprises detecting the initial capacitance as an accurate gate capacitance of the MOS transistor when it is determined that both the calculated capacitance is equal to the measured capacitance and the calculated dissipation factor is equal to the measured dissipation factor. Applicants respectfully submit that the APA does not disclose a calculated dissipation factor, as stated above, and thus, the APA does not disclose performing any step when it is determined that a calculated dissipation factor is equal to the measured dissipation factor.

The Office Action states that such features are disclosed in step 160 of FIG. 1, and paragraph [00012]. Applicants respectfully submit that these features are not disclosed in paragraph [00012] or step 160. Indeed, neither paragraph [00012], nor step 160, even mention the words “dissipation factor.”

Furthermore, FIG. 1 cannot disclose repeating steps until, or performing actions

after, the measured dissipation factor is equal to the calculated dissipation factor since FIG. 1 does not even disclose a calculated dissipation factor. Thus, FIG. 1 and cited paragraphs [00011] and [00012] do not disclose each and every element of claim 8, so FIG. 1 and paragraphs [00011] and [00012] do not anticipate claim 8. Therefore, claim 8 is deemed patentable over the APA.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 8 is patentable over the APA.

#### Claims 9-12

Claims 9-12 depend from claim 8 and are deemed patentable for at least the reasons set forth above with respect to claim 8, and for the following additional reasons.

Regarding the Office Action statements in the last paragraph of page 2, which is continued on page 3, and the first, second, and third complete paragraphs of page 3, Applicants traverse the suggestion that paragraphs [00017], [00018], [00019], and [00022] of the subject application are APA. Applicants respectfully submit that the above paragraphs of the subject application are not APA and that nowhere do Applicants suggest that the above paragraphs of the subject application are prior art. Furthermore, Applicants traverse the suggestion that the above paragraphs of the subject application refer to FIG. 1, as suggested by the Office Action. Applicants respectfully submit that the above paragraphs of the subject application do not refer to FIG. 1 and that nowhere do Applicants suggest that the above paragraphs of the subject application refer to FIG. 1.

#### Claim 9

Among other things, the method of determining a gate capacitance of a MOS transistor of amended claim 9 includes, prior to step (c), measuring a direct gate current, a direct drain current, a direct gate voltage, and a direct drain voltage of the MOS transistor. Applicants respectfully submit that the APA does not disclose the above features.

The Office Action states that these features are disclosed in FIG. 1, and paragraph

[00017] lines 1-3. Applicants respectfully submit that FIG. 1 does not disclose these features of claim 9. Indeed, FIG. 1 does not even mention “direct gate current,” “direct drain current,” “direct gate voltage,” or “direct drain voltage.” Furthermore, as stated previously, paragraph [00017] is not APA.

Also, among other things, the method of determining a gate capacitance of a MOS transistor of claim 9 includes obtaining a channel resistance and a tunneling resistance of the MOS transistor using the direct gate current, the direct drain current, the direct gate voltage, and the direct drain voltage, wherein the calculated dissipation factor is calculated in step (c) based upon the channel resistance and the tunneling resistance. Applicants respectfully submit that the APA does not disclose the above features.

The Office Action states that obtaining a channel resistance and a tunneling resistance of the MOS transistor using the direct gate current, the direct drain current, the direct gate voltage, and the direct drain voltage is disclosed in FIG. 1 and paragraph [00017] lines 3-5, and that performing the above wherein the calculated dissipation factor is calculated in step (c) based upon the channel resistance and the tunneling resistance is disclosed in FIG. 1 and paragraph [00018]. Applicants respectfully submit that FIG. 1 does not disclose any of these features. Indeed, the terms “direct gate current,” “direct drain current,” “direct gate voltage,” “direct drain voltage,” and “calculated dissipation factor” are not even mentioned in FIG. 1. Furthermore, as stated previously, paragraphs [00017] and [00018] are not APA.

Accordingly, for at least these additional reasons, Applicants respectfully submit that claim 9 is patentable over the APA.

#### Claim 11

Among other things, in the method of amended claim 11  $D_{err}$  is an error dissipation factor. Applicants respectfully submit that the APA does not disclose an error dissipation factor.

Applicants respectfully submit that an error dissipation factor is not disclosed in

FIG. 1. Indeed, FIG. 1 does not even mention the words “error dissipation factor.” The Office Action cited paragraphs [00022] and [00019] of the reference application as APA regarding original claim 11; however, as stated previously, paragraphs [00022] and [00019] are not APA.

Applicants respectfully submit that the APA does not disclose each and every element of claim 11, and thus claim 11 is deemed patentable over the APA.

Accordingly, for at least these additional reasons, Applicants respectfully submit that claim 11 is patentable over the APA.

#### Claim 12

Among other things, the method of determining a gate capacitance of a MOS transistor of amended claim 12 includes the method of claim 8, wherein the calculated dissipation factor is calculated by  $D_m = D_{dc} \cdot (1 - D_{err}(1 + D_m))$ . Applicants respectfully submit that the APA does not disclose a calculated dissipation factor.

The Office Action states that FIG. 1 and paragraph [00022] disclose that the calculated dissipation factor is calculated by  $D_m = D_{dc} \cdot (1 - D_{err}(1 + D_m))$ . Applicants respectfully submit that a calculated dissipation factor is not disclosed in FIG. 1. Indeed, FIG. 1 does not even mention the words “calculated dissipation factor.” Furthermore, as stated previously, paragraph [00022] is not APA.

Applicants respectfully submit that the APA does not disclose each and every element of claim 12, and thus claim 12 is deemed patentable over the APA.

Accordingly, for at least these additional reasons, Applicants respectfully submit that claim 12 is patentable over the APA.

#### CONCLUSION

In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 1-12, and pass the application to issue. In the event that there are any outstanding matters remaining in


the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283-0720 to discuss these matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 50-0238 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17, particularly extension of time fees.

Respectfully submitted,

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